ELECTRICITY
FUNDAMENTALS

Electricity Fundamentals (Billion KWh)

	2020	2021	2022	2023	2024
World Scenario					
Generation	26,526	27,907	28,552	29,140	30,664
Consumption	24,563	25,894	26,536	27,081	28,534
Import	746	774	818	805	831
Export	747	769	822	811	842
Capacity	8	8	9	9	10
	2020	**2021**	**2022**	**2023**	**2024**
Indian Scenario					
Generation	1,523	1,628	1,760	1,805	2,052
Consumption	1,251	1,355	1,479	1,500	1,758
Import	9	10	8	8	8
Export	9	10	10	10	10
Capacity	0.45	0.47	0.48	0.50	0.53

Source : EIA Downloaded on 26th May 2026.



ELECTRICITY
Fundamentals

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Electricity Fundamentals (Billion Kwh)

2020		2021		2022		2023		2024	
Country	Value	Country	Value	Country	Value	Country	Value	Country	Value
Major Importing countries									
United States	61	United States	53	United States	57	Germany	69	Germany	82
Germany	48	Germany	52	France	53	Italy	55	Italy	56
Italy	40	Italy	47	Germany	49	United States	39	United Kingdom	44
Thailand	30	Thailand	33	Italy	47	United Kingdom	33	Thailand	36
Switzerland	27	Switzerland	32	Thailand	35	Switzerland	27	United States	33
Total	749	Total	774	Total	824	Total	629	Total	831
Major Exporting countries									
Canada	67	Germany	70	Germany	76	France	76	France	105
Germany	67	France	69	Canada	65	Germany	60	Germany	55
France	65	Canada	60	Laos	40	Canada	49	Switzerland	40
Sweden	37	Laos	35	Sweden	39	Sweden	36	Sweden	39
Switzerland	33	Sweden	34	France	37	Switzerland	34	Laos	38
Total	752	Total	778	Total	820	Total	604	Total	842
Major Producing countries									
China	7,727	China	8,321	China	8,669	China	9,267	China	10,162
United States	4,051	United States	4,159	United States	4,292	United States	4,257	United States	4,393
India	1,523	India	1,628	India	1,760	India	1,805	India	2,052
Russia	1,079	Russia	1,148	Russia	1,136	Russia	1,124	Russia	1,160
Japan	994	Japan	1,014	Japan	996	Japan	945	Japan	907
Total	26,525	Total	27,910	Total	28,558	Total	29,146	Total	30,664
Major Consuming countries									
China	7,386	China	7,982	China	8,349	China	8,928	China	9,794
United States	3,897	United States	3,994	United States	4,128	United States	4,085	United States	4,194
India	1,251	India	1,355	India	1,479	India	1,500	India	1,758
Russia	973	Russia	1,028	Russia	1,021	Russia	1,011	Russia	1,045
Japan	953	Japan	966	Japan	953	Japan	903	Japan	859
Total	24,563	Total	25,901	Total	26,540	Total	27,087	Total	28,534

Source: EIA Downloaded on 26th May 2026.



ELECTRICITY
Fundamentals

ELECTRICITY
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Region wise Electricity Generation in India (GWh)

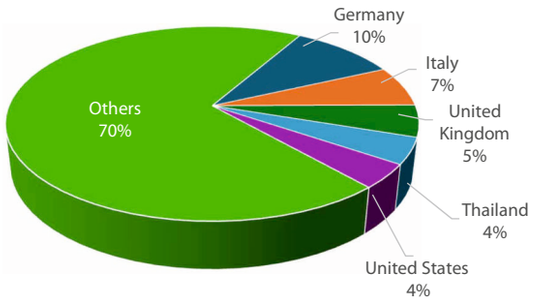
Region	2021-22	2022-23	2023-24	2024-25	2025-26
Northern Region					
Thermal	2,36,059	2,76,912	2,80,773	2,97,307	2,83,928
Nuclear	11,889	9,780	9,934	11,060	13,588
Hydro	73,866	77,624	73,089	76,489	82,627
Total	3,21,814	3,64,316	3,63,796	3,84,857	3,80,143
Western Region					
Thermal	4,50,038	4,60,826	5,32,747	5,42,524	5,10,672
Nuclear	12,106	12,625	15,689	20,769	20,172
Hydro	13,720	19,574	16,587	19,690	20,296
Total	4,75,863	4,93,026	5,65,023	5,82,983	5,51,140
Southern Region					
Thermal	1,98,910	2,14,626	2,48,247	2,49,013	2,42,941
Nuclear	23,117	23,456	22,314	24,851	21,431
Hydro	37,206	36,870	20,309	33,967	43,443
Total	2,59,234	2,74,951	2,90,869	3,07,831	3,07,815
Eastern Region					
Thermal	2,15,774	2,38,374	2,49,996	2,61,751	2,57,394
Hydro	20,462	20,889	17,785	11,217	12,611
Total	2,36,237	2,59,263	2,67,782	2,72,968	2,70,005
North Eastern Region					
Thermal	13,933	15,473	14,787	13,295	12,196
Hydro	6,373	7,142	6,284	7,271	8,227
Total	20,306	22,615	21,070	20,566	20,422
Bhutan Imp. Region					
	7,493	6,742	4,716	5,484	7,831
All India Region					
Thermal	11,14,714	12,06,211	13,26,549	13,63,890	13,07,131
Nuclear	47,112	45,861	47,937	56,681	55,191
Hydro	1,51,627	1,62,099	1,34,054	1,48,634	1,67,204
Bhutan Imp.	7,493	6,742	4,716	5,484	7,831
Total	13,20,947	14,20,913	15,13,256	15,74,689	15,37,356

Source: National Power Portal, downloaded as on 26th May 2026.



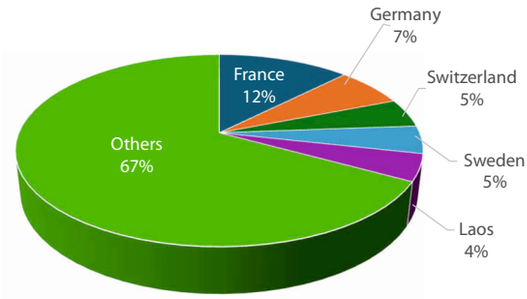
ELECTRICITY
Fundamentals

Major Importing countries 2024



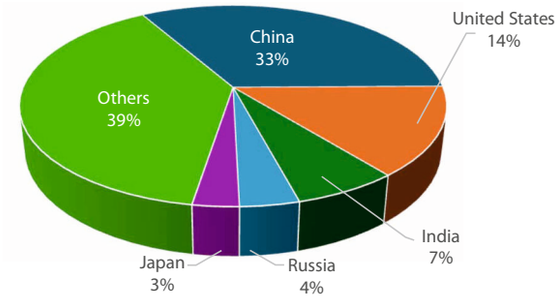
Source: EIA

Major Exporting countries 2024



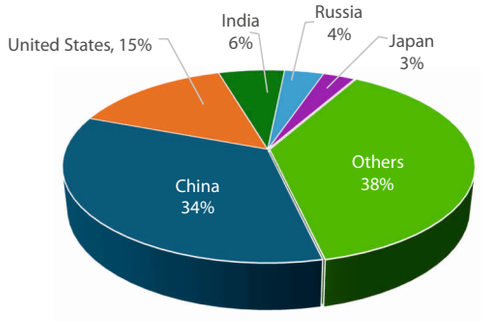
Source: EIA

Major Producing countries 2024



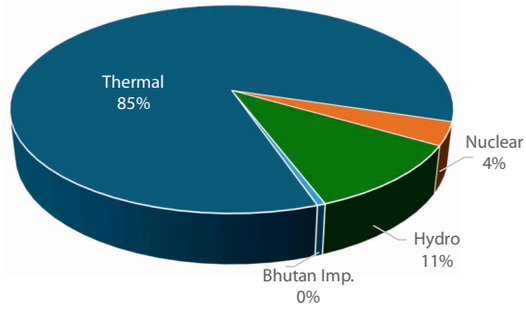
Source: EIA

Major Consuming countries 2024



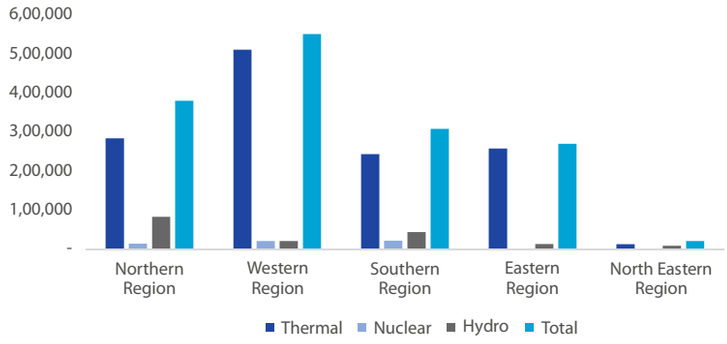
Source: EIA

All India Electricity Generation in 2025



Source: National Power Portal

Region wise Electricity Generation in India (GWh)



Source: National Power Portal



ELECTRICITY Fundamentals